What is claimed is:

1. A filter module comprising a lens, three optical fibers, an optical filter, and a mirror, wherein said three optical fibers are arranged on a single side of said lens.

2. The filter module according to claim 1, wherein said lens is a refractive index distribution type rod lens having first and second end faces on opposite sides of the lens, wherein the first end face is coated with said optical filter, and wherein said three optical fibers are arranged on the second end face.

3. The filter module according to claim 1, further comprising a capillary for holding said three optical fibers, wherein the capillary is provided with a through hole for holding the three optical fibers .

4. The filter module according to claim 3, wherein said through hole is formed by three inner walls, wherein said three optical fibers contact each other in said through hole, and each of said three inner walls contacts two optical fibers.

5. The filter module according to claim 1, wherein said mirror is a board having a wavelength independent total reflection mirror, and said mirror is arranged to face said optical filter.

6. The filter module according to claim 1, wherein said optical filter is a wavelength selective transmitting film, and wherein a set of fiber collimators is provided facing said wavelength selective transmitting film.

7. A demultiplexing/multiplexing unit, which is a multichannel demultiplexing/multiplexing unit formed by

connecting in cascade a plurality of filter modules, wherein each of the filter modules comprises a lens, three optical fibers, an optical filter, and a mirror; and said three optical fibers are arranged on a single side of said lens.

8. The demultiplexing/multiplexing unit according to claim 7, wherein said lens is a refractive index distribution type rod lens having first and second end faces on opposite sides of the lens, wherein the first end face is coated with said optical filter, and wherein said three optical fibers are arranged on the second end face.

9. The demultiplexing/multiplexing unit according to claim 7, wherein said filter module further comprises a capillary for holding said three optical fibers, and the capillary is provided with a through hole for holding the three optical fibers .

10. The demultiplexing/multiplexing unit according to claim 9, wherein said through hole is formed by three inner walls, wherein said three optical fibers contact each other in said through hole, and each of said three inner walls contacts two optical fibers.

11. The demultiplexing/multiplexing unit according to claim 7, wherein said mirror is a board having a wavelength independent total reflection mirror, and said mirror is arranged to face said optical filter.